

IN THE CLAIMS:

1-17 (Cancelled)

18. (New) An apparatus for the delivery of a therapeutic agent to a predetermined site within a patient comprising:

means for the administration of said therapeutic agent to said patient comprising a reservoir for the therapeutic agent, at least one orifice through which the agent is administered, and means to transfer a predetermined amount of the therapeutic agent from said reservoir through said orifice to the predetermined site within the patient;

a plurality of penetrating electrodes which are arranged to be deployable to a predetermined depth within the patient; and

means for generating an electrical signal operatively connected to said electrodes.

19. (New) The apparatus as recited in claim 18 further comprising an inanimate source of energy operatively connected to said electrodes to deploy the electrodes to the predetermined depth within the patient.

20. (New) The apparatus as recited in claim 19 wherein the electrodes comprise a subassembly that can be separated from the source of energy.

21. (New) The apparatus as recited in claim 18 wherein the electrodes comprise a conductive, electrochemically stable compound.

22. (New) The apparatus as recited in claim 21 wherein said conductive, electrochemically stable compound consists of at least one of the following materials: titanium nitride, platinum, platinum iridium, iridium oxide.

23. (New) The apparatus as recited in claim 18 wherein the electrodes comprise a conductive metal coated with a conductive, electrochemically stable compound.

24. (New) The apparatus as recited in claim 23 wherein said conductive, electrochemically stable compound consists of at least one of the following materials: titanium nitride, platinum, platinum iridium, iridium oxide.

25. (New) The apparatus as recited in claim 19 wherein the source of energy to deploy the electrodes is at least one compressed gas.

26. (New) The apparatus as recited in claim 19 wherein the source of energy to deploy the electrodes is at least one spring.

27. (New) The apparatus as recited in claim 18 wherein the means for administration of the therapeutic agent is an automatic injection device.

28. (New) The apparatus as recited in claim 27 wherein said reservoir is a syringe including a penetrating hypodermic needle.

29. (New) The apparatus as recited in claim 18 wherein the means for administration of the therapeutic agent is a jet injector.

30. (New) The apparatus as recited in claim 29 wherein the jet injector comprises means for controlling the rate at which the agent is transferred through the orifice.

31. (New) An apparatus for the delivery of a therapeutic agent to a predetermined site within a patient comprising:

means for the administration of said therapeutic agent to said patient comprising a reservoir for the therapeutic agent, at least one orifice through which the agent is administered, and an inanimate source of energy sufficient to transfer a predetermined amount of the therapeutic agent from said reservoir through said orifice to the predetermined site within the patient;

a plurality of penetrating electrodes arranged to be deployable to a predetermined depth within the patient; and

means for generating an electrical signal operatively connected to said electrodes.

32. (New) The apparatus as recited in claim 31 further comprising an inanimate source of energy operatively connected to said electrodes to deploy the electrodes to the predetermined depth within the patient.

33. (New) The apparatus of claim 32 wherein said agent transfer source of energy and said electrode deployment source of energy are the same source of energy.

34. (New) The apparatus of claim 32 wherein said agent transfer source of energy and said electrode deployment source of energy are distinct sources of energy.

35. (New) The apparatus as recited in claim 31 further comprising a housing for said agent reservoir and said plurality of deployable, penetrating electrodes.

36. (New) The apparatus as recited in claim 32 wherein the electrodes comprise a subassembly that can be separated from the electrode deployment source of energy.

37. (New) The apparatus as recited in claim 31 wherein the electrodes comprise a conductive, electrochemically stable compound.

38. (New) The apparatus as recited in claim 37 wherein said conductive, electrochemically stable compound consists of at least one of the following materials: titanium nitride, platinum, platinum iridium, iridium oxide.

39. (New) The apparatus as recited in claim 31 wherein the electrodes comprise a conductive metal coated with a conductive, electrochemically stable compound.

40. (New) The apparatus as recited in claim 39 wherein said conductive, electrochemically stable compound consists of at least one of the following materials: titanium nitride, platinum, platinum iridium, iridium oxide.

41. (New) The apparatus as recited in claim 32 wherein the source of energy to deploy the electrodes is at least one compressed gas.

42. (New) The apparatus as recited in claim 32 wherein the source of energy to deploy the electrodes is at least one spring.

43. (New) The apparatus as recited in claim 31 wherein the means for administration of the therapeutic agent is an automatic injection device.

44. (New) The apparatus as recited in claim 43 wherein said reservoir is a syringe including a penetrating hypodermic needle.

45. (New) The apparatus as recited in claim 31 wherein the source of energy to administer the agent is at least one compressed gas.

46. (New) The apparatus as recited in claim 31 wherein the source of energy to administer the agent is at least one spring.

47. (New) The apparatus as recited in claim 31 wherein the means for administration of the therapeutic agent is a jet injector.

48. (New) The apparatus as recited in claim 47 wherein the jet injector comprises means for controlling the rate at which the agent is transferred through the orifice.

49. (New) An apparatus for the delivery of a therapeutic agent to a predetermined site within a patient comprising:

means for the administration of said therapeutic agent to said patient comprising a reservoir for the therapeutic agent, at least one orifice through which the agent is administered, and an inanimate source of energy sufficient to transfer a predetermined amount of the therapeutic agent from said reservoir through said orifice to the predetermined site within the patient;

a plurality of penetrating electrodes operatively connected to an inanimate source of energy sufficient to deploy the electrodes to a predetermined depth within the patient; and

means for generating an electrical signal operatively connected to said electrodes.

50. (New) The apparatus of claim 49 further comprising a user activated means to control the sequence and timing of agent administration, electrode deployment, and electrical signal application.

51. (New) The apparatus of claim 49 wherein said agent transfer source of energy and said electrode deployment source of energy are the same source of energy.

52. (New) The apparatus of claim 49 wherein said agent transfer source of energy and said electrode deployment source of energy are distinct sources of energy.

53. (New) The apparatus as recited in claim 49 further comprising a housing for said agent reservoir and said plurality of deployable, penetrating electrodes.

54. (New) The apparatus as recited in claim 49 wherein the electrodes comprise a subassembly that can be separated from the electrode deployment source of energy.

55. (New) The apparatus as recited in claim 49 wherein the electrodes comprise a conductive, electrochemically stable compound.

56. (New) The apparatus as recited in claim 55 wherein said conductive, electrochemically stable compound consists of at least one of the following materials: titanium nitride, platinum, platinum iridium, iridium oxide.

57. (New) The apparatus as recited in claim 49 wherein the electrodes comprise a conductive metal coated with a conductive, electrochemically stable compound.

58. (New) The apparatus as recited in claim 57 wherein said conductive, electrochemically stable compound consists of at least one of the following materials: titanium nitride, platinum, platinum iridium, iridium oxide.

59. (New) The apparatus as recited in claim 49 wherein the source of energy to deploy the electrodes is at least one compressed gas.

60. (New) The apparatus as recited in claim 49 wherein the source of energy to deploy the electrodes is at least one spring.

61. (New) The apparatus as recited in claim 49 wherein the means for administration of the therapeutic agent is an automatic injection device.

62. (New) The apparatus as recited in claim 61 wherein said reservoir is a syringe including a penetrating hypodermic needle.

63. (New) The apparatus as recited in claim 49 wherein the source of energy to administer the agent is at least one compressed gas.

64. (New) The apparatus as recited in claim 49 wherein the source of energy to administer the agent is at least one spring.

65. (New) The apparatus as recited in claim 49 wherein the means for administration of the therapeutic agent is a jet injector.

66. (New) The apparatus as recited in claim 65 wherein the jet injector comprises means for controlling the rate at which the agent is transferred through the orifice.